

IN THE CLAIMS:

Claims 2, 11, and 16 were previously canceled without prejudice or disclaimer. Claims 1, 3, 4, 5, 6, 7, 12, 17, and 22 have been amended herein without prejudice or disclaimer. All of the pending claims 1, 3-10, 12-15, and 17-22 are presented below. This listing of claims will replace all prior versions and listings of claims in the application. Please enter these claims as amended.

Listing of the Claims:

1. (Currently amended) A ~~genetically transformed~~ transgenic plant, comprising:
an isolated nucleic acid sequence ~~transformed~~ incorporated into the plant's genome having a
sequence selected from the group of sequences consisting of SEQ ID NO:1, SEQ ID
NO:2, SEQ ID NO:3 and SEQ ID NO:4; and
a promoter operatively linked to the nucleic acid sequence ~~transformed into the plant's genome~~.

2.(Canceled)

3. (Currently amended) The ~~genetically transformed~~ transgenic plant of claim 1, wherein
the plant is selected from the group consisting of borage, Canola, castor, cocoa bean, corn,
cotton, Crambe spp., Cuphea spp., flax, Lesquerella and Limnanthes spp., Linola, nasturtium,
Oenothera spp., olive, palm, peanut, rapeseed, safflower, soybean, sunflower, tobacco, Vernonia
spp and members of the Gramineae.

4. (Currently amended) The ~~genetically transformed~~ transgenic plant of claim 3, wherein
the plant is Canola.

5. (Currently amended) The ~~genetically transformed~~ transgenic plant of claim 1, wherein
the ~~means for modulating mitochondrially generated acetyl CoA and/or respiration rate~~ nucleic
acid sequence further includes a gene encoding a pyruvate dehydrogenase kinase oriented in an
anti-sense direction.

6. (Currently amended) The ~~genetically transformed~~ transgenic plant of claim 1, wherein

the promoter is an ubiquitin gene promoter.

7. (Currently amended) The ~~genetically transformed~~ transgenic plant of claim 1, wherein the promoter is a phaseolin promoter.

8. (Previously presented) A process for modulating mitochondrially generated acetyl-CoA and/or respiration rate in a transgenic plant, the process comprising:
cloning a gene encoding a *Brassica* pyruvate dehydrogenase kinase protein into a vector, wherein the gene comprises a sequence selected from the group consisting of SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3 and SEQ ID NO:4;
positioning the gene in an anti-sense orientation within the vector; and
transforming a plant with the vector to produce the transgenic plant.

9. (Original) The process according to claim 8, further comprising:
linking a promoter to the gene.

10. (Previously presented) The process according to claim 9, wherein the promoter is an ubiquitin gene promoter or a phaseolin promoter.

11. (Canceled)

12. (Currently amended) The process according to claim 8, wherein the plant is selected from the group consisting of borage, Canola, castor, cocoa bean, corn, cotton, Crambe spp., Cuphea spp., flax, Lesquerella and Limnanthes spp., Linola, nasturtium, Oenothera spp., olive, palm, peanut, rapeseed, safflower, soybean, sunflower, tobacco, Vernonia spp. and members of the *Gramineae*.

13. (Original) The process according to claim 12, wherein the plant is Canola.

14. (Original) A transgenic plant obtained by the process according to claim 8.

15. (Previously presented) A process for modulating mitochondrially generated acetyl-CoA and/or respiration rate in a transgenic plant, the process comprising:
cloning a gene encoding a *Brassica* pyruvate dehydrogenase kinase protein into a vector, wherein
the gene comprises a sequence selected from the group of sequences consisting of SEQ ID NO:1,
SEQ ID NO:2, SEQ ID NO:3 and SEQ ID NO:4;
transforming the vector into a plant to produce the transgenic plant; and
reducing production of the *Brassica* pyruvate dehydrogenase kinase protein in the transgenic
plant.

16. (Canceled)

17. (Currently amended) The process according to claim 15, wherein the plant is
selected from the group consisting of borage, Canola, castor, cocoa bean, corn, cotton, Crambe
spp., Cuphea spp., flax, Lesquerella and Limnanthes spp., Linola, nasturtium, Oenothera spp.,
olive, palm, peanut, rapeseed, safflower, soybean, sunflower, tobacco, Vernonia spp and
members of the *Gramineae*.

18. (Original) The process according to claim 17, wherein the plant is Canola.

19. (Original) The process according to claim 15, wherein the step for reducing
production of the *Brassica* pyruvate dehydrogenase kinase protein comprises positioning the
gene encoding the *Brassica* pyruvate dehydrogenase kinase protein in an anti-sense orientation in
the vector.

20. (Previously presented) A transgenic plant produced by the process according to
claim 15.

21. (Previously presented) A combination of DNA fragments comprising SEQ ID
NO:1, SEQ ID NO:2, SEQ ID NO:3 and SEQ ID NO:4.

22. (Currently amended) A genetically transformed transgenic plant, comprising:

an isolated nucleic acid transformed into the plant's genome having a sequence of SEQ ID NO:1; and

a promoter operatively linked to the isolated nucleic acid transformed into the plant's genome.